

# REQUEST FOR ACCESS OF ABANDONED APPLICATION UNDER 37 CFR 1.14(a)

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In re Application of

Blum et al.

Application Number

08/759 765

Filed

Dec 3, 1996

Group Art Unit

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Paper No. #5

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I hereby request access under 37 CFR 1.14(a)(3)(iv) to the application file record of the above-identified ABANDONED application, which is: (CHECK ONE)

☒ (A) referred to in United States Patent Number 6242487, column \_\_\_\_\_.

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☐ (C) an application that claims the benefit of the filing date of an application that is open to public inspection, i.e., Application No. \_\_\_\_\_, filed \_\_\_\_\_, or

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US006242487B1

(12) **United States Patent**  
**Blum et al.**

(10) **Patent No.:** **US 6,242,487 B1**  
 (45) **Date of Patent:** **Jun. 5, 2001**

(54) **CARNITINE SUPPLEMENTED DIETS FOR GESTATING AND LACTATING SWINE**

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(\*) **Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) **Appl. No.:** **08/984,080**

(22) **Filed:** **Dec. 3, 1997**

(Under 37 CFR 1.47)

**Related U.S. Application Data**

(63) Continuation-in-part of application No. 08/844,918, filed on Apr. 22, 1997, now abandoned, which is a continuation of application No. 08/759,765, filed on Dec. 3, 1996, now abandoned.

(51) **Int. Cl.<sup>7</sup>** ..... **A61K 31/195**

(52) **U.S. Cl.** ..... **514/561**

(58) **Field of Search** ..... **514/561**

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

4,883,672 11/1989 Shug et al. .  
 5,124,357 6/1992 Newton et al. .  
 5,192,804 3/1993 Blum et al. .  
 5,480,659 1/1996 Tokach et al. .

**FOREIGN PATENT DOCUMENTS**

0 535 440 4/1993 (EP) .  
 0 680 945 11/1995 (EP) .  
 57-126420 1/1981 (JP) .

**OTHER PUBLICATIONS**

R.E. Musser et al.: "Added L-carnitine fed during gestating increases birth weight of pigs", *Journal of Animal Science*, vol. 75, No. Suppl. 1, 1997, US, p. 199 XP002061792, See Abstract 250.

D.C. Honeyfield et al.: "Evaluation of energy sources with and without carnitine in newborn pig heart and liver", *Journal of Nutrition*, vol. 121, No. 7, 1991, US, pp. 1117-1122, XP002061793, see the whole document.

M.T. Coffey et al.: "Carnitine status and lipid utilization in neonata piglets fed diets low in carnitine", *Journal of Nutrition*, vol. 121, No. 7, 1991, US, pp. 1047-1053, XP002061794, cited in the application, see the whole document.

J. Kerner et al.: "A study of the acylcarnitine content of sows' colostrum, milk and newborn piglet tissues: demonstration of high amounts of isovaleryl-carnitine in colostrum and milk", *Journal of Nutrition*, vol. 114, No. 5, 1984, US, pp. 854-861, XP002061795, see the whole document.

Musser, R.E. et al., *Swine Day*, pp. 31-37, 1997.

Horton, G.M.J. et al., *J. Animal Sci.*, 67(2):226, (ASAS Section Abstracts), Jul. 31-Aug. 4, 1989.

Fremaut, D. et al., *Varkensbedrijf* 6:20-23, Jun. 1993 (Translation).

Leibovitz, Brian, *Twinlab: Nutrition Update* 2(3):1-13, 1987.

Staples, C.R. et al., *J. Dairy Sci.* 58(5):802, 1975.

Snoswell, A.M. et al., *J. Dairy Res.* 42:371-380, 1975.

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(57) **ABSTRACT**

The present invention relates to a method of feeding carnitine supplemented diets to sows during the period of gestation or during both gestation and lactation periods. The method enhances pork productivity by increasing litter and pig birth and weaning weights, reducing the number of stillborn pigs and increasing the number of pigs born alive in the subsequent reproductive cycle. Sow diets of this invention include carnitine, such as L-carnitine or L-carnitine salts. Carnitine is generally added to the swine feed formulation in the amount of from about 50 to about 5,000 ppm.

**6 Claims, No Drawings**

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